

STATE OF MINNESOTA  
OFFICE OF ADMINISTRATIVE HEARINGS  
FOR THE PUBLIC UTILITIES COMMISSION

In the Matter of the Application of Xcel Energy and Great River Energy (GRE) for a Certificate of Need and Route Permit for the SWTC Chaska Area 115 kV Transmission Line Rebuild Project in Carver and Scott Counties

**FINDINGS OF FACT,  
CONCLUSIONS OF LAW,  
AND RECOMMENDATION**

This matter came before Administrative Law Judge M. Kevin Snell (ALJ) for a public hearing on May 2, 2013, in Chaska, Minnesota. By an order issued August 21, 2012, the Public Utilities Commission (the Commission) requested that the ALJ develop a record regarding the Applicants' Certificate of Need Application.<sup>1</sup> By an order issued September 11, 2012, the Commission requested that the ALJ prepare a report setting forth factual findings, conclusions, and recommendations on the merits of the Applicants' Route Permit Application.<sup>2</sup>

The following persons noted their appearances: Kodi Jean Church, Briggs and Morgan, P.A., appeared on behalf of Xcel Energy and GRE (Applicants). Bill Storm, Environmental Review Manager, appeared on behalf of the Department of Commerce, Energy Facility Permitting Unit (EFP).

Sage Tauber, Permitting Analyst; Chris Rogers, Land Rights Agent; Jeff Gutzmann, Transmission Engineer; and Paul Lehman, Manager Compliance and Filings, also participated in the hearing on behalf of Xcel Energy. Steve Lawler, Project Manager, participated on behalf of Great River Energy.

Also participating and facilitating the public hearing was Tricia DeBleeckere, Senior Facilities Planner for the Commission. Also present was Tracy M.B. Smetana, Public Advisor to the Commission.

The hearing record closed following the receipt of all Reply Briefs on June 21, 2013.

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<sup>1</sup> Order Accepting Application as Complete and Initiating Informal Review Process, Certificate of Need (CN) Exhibit 21, (E-docket No. 20128-78011-01).

<sup>2</sup> Order Finding Application Complete, Referring Application to the Office of Administrative Hearings, and Appointing a Public Advisor, Exhibit 8 ( E-docket No. 20129-78555-01). Unless otherwise noted, all exhibit numbers refer to the Route Permit Application, Commission docket no. E-002/TL-12-401.

## STATEMENT OF THE ISSUE

Have the Applicants demonstrated that the Southwest Twin Cities (SWTC) Chaska Area Project upgrading the 69 kV Transmission Line to 115 kV meets the criteria set forth in Minn. Stat. § 216E.03 and Minnesota Rules Chapter 7850 for a Route Permit?<sup>3</sup>

Based upon the Findings and Conclusions that follow below, the Administrative Law Judge makes the following:

## SUMMARY OF RECOMMENDATIONS

The Minnesota Public Utilities Commission should:

1. Determine that all relevant statutory and rule criteria necessary to issue a Route Permit have been satisfied and that, on this record, there are no statutory or other requirements that preclude issuance of a Route Permit.
2. Grant a Route Permit to Applicants for:
  - (a) The Applicants' Preferred Route (Route) as depicted in the attached Schedule, together with certain alignment revisions to the originally proposed alignment;<sup>4</sup>
  - (b) Modifications and additions to five existing substations (Augusta, Victoria, West Creek, Chaska and Scott County), all to accommodate the new and upgraded transmission line facilities along the Route.
3. Require Applicants to meet certain special conditions.<sup>5</sup>
4. Require the Applicants to undertake such construction and maintenance practices so as to minimize the impacts to natural resources within the Project Area.
5. Require the Applicants to obtain all required local, state, and federal permits and licenses, to comply with the terms of those permits or licenses, and to comply with all applicable rules and regulations.
6. Require the Applicants to take those actions necessary to implement the Commission's Orders in this proceeding.

Based upon the hearing record, the Administrative Law Judge makes the following:

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<sup>3</sup> The issue is limited to the routing permit because, in its August 21, 2012 Order, the Commission did not request that the ALJ provide a recommendation for the Certificate of Need.

<sup>4</sup> Conclusion 19.

<sup>5</sup> Conclusion 21.

## FINDINGS OF FACT

### A. Applicants

1. Northern States Power Company (NSP) is a Minnesota corporation headquartered in Minneapolis, Minnesota.<sup>6</sup> NSP is a wholly owned subsidiary of Xcel Energy, Inc., a utility holding company with its headquarters in Minneapolis, Minnesota.<sup>7</sup> NSP owns and operates a number of generation facilities including coal, oil, natural gas, hydro power, refuse derived fuel, and nuclear power plants.<sup>8</sup> NSP serves approximately 1.3 million electric customers in Minnesota.<sup>9</sup>

2. Great River Energy is a Minnesota not-for-profit generation and transmission cooperative corporation headquartered in Maple Grove, Minnesota.<sup>10</sup> Great River Energy owns and operates a number of generation facilities including coal, oil, natural gas, and refuse derived fuel. Great River Energy provides electrical energy and related services to 28 member distribution cooperatives.<sup>11</sup>

3. The Applicants and proposed permittees for the proposed project (Project) are NSP and GRE.<sup>12</sup>

### B. Project and Route Summary

4. The Project rebuilds or converts approximately nine miles of existing 69 kV transmission lines to operate at 115 kV near the City of Chaska and would construct approximately 2.4 miles of new 115 kV single circuit transmission line. The Project also includes relocating transmission facilities from downtown Chaska in an area of developed residential and commercial properties to an area adjacent to existing transportation corridors.<sup>13</sup>

5. Specifically, the Project is comprised of: (1) upgrading approximately 6.1 miles of existing 69 kV single circuit transmission line to single circuit 115 kV transmission line; (2) changing the operating voltage of approximately 2.9 miles of existing 69 kV transmission line to operate at 115 kV; (3) constructing two segments of new 115 kV single circuit transmission line totaling approximately 2.4 miles; (4) abandoning in place approximately 1.0 mile of existing 69 kV transmission line; and (5) removing approximately 0.39 mile of existing 69 kV transmission line through the central portion of the City of Chaska.<sup>14</sup>

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<sup>6</sup> Ex. 2 at 7 (Route Application) (E-docket No. 20127-767-01).

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> Ex. 2. at 9.

<sup>13</sup> Ex. 2 at 1 - 2; Ex. 30; Tauber Direct Testimony, Ex. 30 at 1 – 2 (E-dockets no. 20134-86240-02).

<sup>14</sup> Ex. 2 at 1 – 2; Ex. 30 at 3 - 6.

6. The Project area is within eastern Carver County and northern Scott County, near and within the City of Chaska, and through Dahlgren Township on the west, Laketown Township on the north, and Jackson Township on the east.<sup>15</sup>

7. The Project is needed so that: (1) the transmission system can reliably meet the growing demand for electric power in and near the City of Chaska; (2) the projected strain on the existing Scott County Substation transformers that serve the cities of Chaska, Augusta, and Victoria can be minimized; (3) anticipated transmission line overloads experienced when the Scott County to Chaska 69 kV transmission line is out of service will be eliminated; and (4) possible low voltage conditions on the existing 69 kV system west of the Augusta Substation will be eliminated.<sup>16</sup>

8. The Project will address growing demand in the southwest Twin Cities area, which is due in part to the construction of a new 190,000 square foot data center in Chaska. The new data center will add 20 megawatts of additional load to the area when it is fully operational.<sup>17</sup> The City of Chaska has indicated that there is a possibility that an additional data center of the same or similar size may be developed in the same area in the future.<sup>18</sup>

### **C. The Certificate of Need Application – Informal Process**

9. Minnesota Statutes section 216B.243 requires a Certificate of Need prior to construction of a “large energy facility.” A large energy facility includes “any high-voltage transmission line with a capacity of 100 kilovolts or more with more than ten miles of its length in Minnesota or that crosses a state line.”<sup>19</sup>

10. Because the Project would have a capacity of 115 kV and is more than ten miles in length it qualifies as a “large energy facility” that requires a Certificate of Need.

11. The criteria for evaluating an application for a Certificate of Need are set forth at Minn. Stat. § 216B.243, and elaborated at Minn. R. 7849.0120. Application of the criteria includes a determination of need and whether there is a more reasonable and prudent alternative to address that need.<sup>20</sup>

12. The Commission has the discretion to evaluate Certificate of Need requests using either contested case proceedings or an informal notice and comment process.<sup>21</sup> The informal process is a less structured method of developing the record and provides an opportunity for the identification of contested issues.<sup>22</sup> Under the informal process, Commission staff manage the development of the case record by

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<sup>15</sup> Ex. 30 at 3; *see also* Ex. 2 at 3.

<sup>16</sup> Ex. 2 at 15 - 17.

<sup>17</sup> *Id.*

<sup>18</sup> Ex. 2 at 16.

<sup>19</sup> Minn. Stat. § 216B.2421, subd. 2(3).

<sup>20</sup> *See, e.g.*, Minn. R. 7849.0120 B.

<sup>21</sup> Minn. R. 7829.2500, subp. 9.

<sup>22</sup> CN Ex. 21 at 2.

establishing necessary comment periods and ensuring compliance with statutory requirements such as the submission of an environmental report and the holding of one or more public hearings.<sup>23</sup>

13. On May 15, 2012, Applicants filed a Certificate of Need application for the Project.<sup>24</sup>

14. The Department of Commerce, Division of Energy Resources (DER), in comments filed June 11, 2012, recommended the Commission find the Certificate of Need Application complete upon the filing of additional information by the Applicants.<sup>25</sup> The Applicants filed the additional information requested by the DER on June 21, 2012.<sup>26</sup>

15. On August 21, 2012, the Commission accepted the Certificate of Need Application as complete and initiated an informal process for Commission action without contested case proceedings under Minn. Stat. § 15.47, *et seq.*, unless contested case proceedings were later determined to be necessary.<sup>27</sup>

16. The DER was the only stakeholder to submit comments regarding Applicants' Certificate of Need Application during the comment period set forth by the Commission.

17. The DER reviewed Applicants' Certificate of Need application for the Project and submitted comments on January 28, 2013.<sup>28</sup> The DER concluded that the "actual load for several substations in the area exceeds the level at which reliable service can be provided;" and "the addition of a large load in the near future will cause load in the area to exceed the level at which reliable service can be provided. Therefore, some action needs to be taken."<sup>29</sup>

18. Regarding the potential alternatives to the proposed Project, the DER reviewed lower voltages, conservation, distributed generation, and other alternatives. Based on this review, the DER concluded that Applicants' proposed Project "proved to be the least cost alternative (in terms of present value per MW served) that met the proposed need."<sup>30</sup> Accordingly, the DER recommended that the Commission approve Applicants' request for a Certificate of Need for the Project.<sup>31</sup>

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<sup>23</sup> CN Ex. 21 at 3.

<sup>24</sup> Certificate of Need Application, CN Ex. 13 at 1 (E-docket no. 20125-74730-02).

<sup>25</sup> DER Comments on Completeness of the Application, CN Ex. 16 at 5 (E-docket no. 20126-75515-01).

<sup>26</sup> Applicants's Supplement, CN Ex. 18 (E-docket no. 20126-75881-01).

<sup>27</sup> CN Ex. 21 at 3-4.

<sup>28</sup> DER Comments on the Merits of the Application, CN Ex. 29 (E-docket no. 20131-83242-01).

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

#### **D. The Route Permit Application**

19. On April 23, 2012, Applicants submitted a Notice of Intent to File a Route Permit Application Pursuant to Alternative Permitting Process for the Project.<sup>32</sup>

20. On July 11, 2012, Applicants submitted a Route Permit Application (Route Application) for the Project.<sup>33</sup>

21. On July 25, 2012, EFP staff filed comments and recommendations regarding the completeness of the Route Application.<sup>34</sup>

22. On August 28, 2012, Applicants filed Affidavits of Publication and Mailings as required under Minn. Stat. § 216E.04, subd. 4 and Minn. R. 7850.3300.<sup>35</sup>

23. On September 11, 2012, the Commission accepted the Route Application as complete and authorized EFP staff to process the Route Application under the Alternative Permitting Process in Minnesota Rules Chapter 7850. The Commission referred the matter to OAH to develop a record for the Commission. The Commission also authorized EFP staff to name a public advisor.<sup>36</sup> Finally, the Commission determined that an advisory task force was not necessary.<sup>37</sup>

24. On September 7, 2012, EFP issued a Notice of Public Information and Environmental Assessment (EA) Scoping Meeting.<sup>38</sup>

25. On September 26, 2012, EFP held a Public Information and EA Scoping Meeting.<sup>39</sup>

26. On October 23, 2012, Applicants filed a response to comments received by EFP during the Scoping Meetings and comment period.<sup>40</sup>

27. On October 31, 2012, EFP submitted a summary of the comments received during the scoping process and alternative routes to the Commission for review.<sup>41</sup>

28. On November 20, 2012, EFP issued the EA Scoping Decision that set forth the alternatives and issues to be addressed in the EA.<sup>42</sup>

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<sup>32</sup> Notice of Intent to File Route Application, Ex. 1 (E-dockets no. 20123-73869-01).

<sup>33</sup> Route Application, Ex. 2 (E-dockets no. 20127-76709-01).

<sup>34</sup> EFP Comments & Recommendations on Application Completeness, Ex. 4 (E-dockets no. 20127-77148-01).

<sup>35</sup> Affidavits of Publication and Mailings, Ex. 7 (E-dockets no. 20128-78199-01).

<sup>36</sup> Order Accepting Application as Complete, Ex. 8 at 5 (E-dockets no. 20129-78555-01).

<sup>37</sup> Ex. 8 at 4.

<sup>38</sup> EFP Notice of EA Scoping Meeting, Ex. 10 (E-dockets no. 20129-78455-01).

<sup>39</sup> *Id.*

<sup>40</sup> Applicants' Response to EA Scoping Comments, Ex. 14 (E-dockets no. 20110-79828-01).

<sup>41</sup> EFP Summary of EA Scoping Process and Alternative Routes, Ex. 15 (E-dockets no. 20210-80165-01).

29. On March 26, 2013, EFP issued its Notice of EA.<sup>43</sup> On March 27, 2013, EFP issued the EA.<sup>44</sup>

30. On April 10, 2013, the Commission issued its Notice of Public Hearing, and advised that the ALJ would preside at the hearing.<sup>45</sup>

31. On April 12, 2013, the Commission provided mailed notice to state agencies and requested participation in record development.<sup>46</sup>

32. On April 26, 2013, EFP Published Notice of Availability of the EA in the EQB Monitor.<sup>47</sup>

33. On May 1, 2013, the ALJ issued the Scheduling Order.<sup>48</sup>

34. On May 2, 2013, a Public Hearing was held at Chaska City Hall Council Chambers, One City Hall Plaza, Chaska, MN 55318 before the ALJ.<sup>49</sup>

35. On May 24, 2013, the public comment period closed.

#### **E. Applicants' Proposed Route**

36. In this Alternative Permitting Process, Applicants evaluated routes that took advantage of rebuilding along existing transmission line rights-of-way to the greatest extent practical.<sup>50</sup> The Proposed Route (Route), where it is not proposed to rebuild existing transmission lines, is designed to best minimize the overall impacts of the Project.<sup>51</sup>

37. The Route is made up of six segments for construction and two segments where existing transmission facilities are proposed to be abandoned in place or removed.<sup>52</sup>

38. Segment 1 includes rebuilding 2.82 miles of existing 69 kV transmission line (Line #0740) to 115 kV single circuit transmission line from west of Aue Lake

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<sup>42</sup> EA Scoping Decision, Ex. 18 (E-dockets no. 201221-80904-01).

<sup>43</sup> Notice of Availability of EA, Ex. 22 (E-dockets no. 20133-85020-01).

<sup>44</sup> EA, Ex. 23 (E-dockets no. 20133-85047-18).

<sup>45</sup> Notice of Public Hearing, Ex. 27 (E-dockets no. 20135-86618-02).

<sup>46</sup> Notice to State Agencies Request for Participation, Ex. 28 (E-dockets no. 20133-85637-01).

<sup>47</sup> Notice of Availability of EA published in the EQB Monitor, Ex. 24 (E-dockets no. 20133-85632-01).

<sup>48</sup> OAH Scheduling Order, Ex. 33 (E-dockets no. 20135-86583-01).

<sup>49</sup> Transcript of Public Hearing (Tr.) (E-dockets no. 20135-87183-01).

<sup>50</sup> Ex. 2 at 23.

<sup>51</sup> Ex. 2 at 22.

<sup>52</sup> Ex. 2 at 1 and 16-18; Ex. 30 at 4, Schedule II.

(Structure No. 142) to the east along County Road 140 to where it intersects with Guernsey Avenue.<sup>53</sup>

39. Segment 2 includes converting the operating voltage of approximately 2.9 miles of 69 kV transmission line to 115 kV on the Great River Energy Victoria tap line (MV-VTT) from the intersection of County Road 140 and Guernsey Avenue to the Victoria Substation.<sup>54</sup>

40. Segment 3 includes constructing approximately 1.78 miles of new 115 kV single circuit transmission line along Highway 212 from west of the intersection with County Road 140 extending northerly approximately 0.71 miles to Creek Road, then northwesterly to the intersection of Creek Road and Wetzel Lane. At this point, Segment 3 extends north approximately 0.61 miles to the south side of Engler Boulevard, then extends west for approximately 0.24 miles and turns north, extending approximately 0.22 miles and terminates at the City of Chaska's West Creek Substation.<sup>55</sup>

41. Segment 3a is the portion of the Route that involves abandoning in place approximately 1.0 mile of existing 69 kV transmission line along County Road 140 between Guernsey Avenue and Highway 212.<sup>56</sup> Abandoning in place means that the existing 69 kV transmission line will be left in its current location with the conductors de-energized and not connected to the transmission system.<sup>57</sup> Essentially, Sections 2 and 3 replace Section 3a through their connection to the West Creek Substation and Tap Line.<sup>58</sup>

42. Segment 4 involves rebuilding 1.79 miles of existing 69 kV transmission to 115 kV single circuit transmission line along the south side of County Road 140, then easterly to the site of the current Chaska substation. The beginning point is a structure east of County Road 140 and Highway 212.<sup>59</sup> The Route then proceeds easterly along County Road 140 for 0.70 miles, then, after crossing County Road 140, proceeds east 0.70 miles to a structure east of the intersection of Creek Lane and Creek Road. The Route then follows Creek Road south to Chaska Blvd for a short distance to West 6<sup>th</sup> Street, where it then follows the north side of Chaska Blvd eastward approximately 0.3 miles to the intersection of Chaska Blvd and Walnut Street. At that point, the Route crosses to the south side of Chaska Blvd and then extends east to the intersection of East 6<sup>th</sup> Street and North Oak Street, there terminating at the site of the current Chaska Substation.<sup>60</sup>

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<sup>53</sup> Ex. 2 at 19-20; Ex. 30 at 4, Schedule II.

<sup>54</sup> *Id.*

<sup>55</sup> Ex. 2 at 19; Applicants' Post Hearing Reply Brief at 3-4 (E-dockets no. 20136-88403-02) and Tr. Exhibit A (E-dockets no. 20136-88403-01).

<sup>56</sup> *Id.*

<sup>57</sup> Ex. 23 at 1.

<sup>58</sup> Ex. 2 at 19.

<sup>59</sup> The beginning point of Segment 3 and end point of Segment 3a.

<sup>60</sup> Ex. 2 at 19, 21.



43. Following submission of the Route Application, Applicants made an adjustment to a portion of the alignment in Segment 4.<sup>61</sup> This proposed realignment shifts the existing alignment approximately 20 to 25 feet south and tapers back to the existing alignment to the east and west to increase the distance between the transmission line and the residential structures at 404 Creek Lane in the City of Chaska.<sup>62</sup>

44. Segment 5 includes constructing approximately 0.58 mile of new 115 kV single circuit transmission line from the site of the current Chaska Substation northeast, parallel to the south side of the railroad tracks along Chaska Boulevard, then southeasterly along the easterly side of Maple Street, across Chaska Creek, then continuing south along the east side of Beech Street to 2<sup>nd</sup> Street where the Route intersects the southerly terminus of Segment 5a and the beginning of Segment 6. Segment 5 replaces Segment 5a.<sup>63</sup>

45. Segment 5a involves removing approximately 0.39 mile of transmission facilities in downtown Chaska from the current Chaska Substation to the intersection of 2<sup>nd</sup> Street and Beech Street.<sup>64</sup> Where Segment 5a has underbuilt distribution lines, the existing poles will be cut above the distribution lines and the top portion of the pole and transmission conductor will be removed. NSP intends to release its transmission line easements along Segment 5a.<sup>65</sup>

46. Segment 6 includes rebuilding approximately 1.46 miles of existing 69 kV transmission line to 115 kV single circuit transmission line. Segment 6 commences at Structure No. 12, south of the intersection of East 2<sup>nd</sup> Street and Beech Street, then proceeds southeast across the Minnesota River, terminating at the Scott County Substation. The Scott County Substation is located 1,600 feet southeast of Fern Lane Terrace along the west edge of U.S. Highway 169.<sup>66</sup>

## **F. Route Alternatives**

47. In their Route Application, the Applicants identified the Route as their preferred route.<sup>67</sup> Applicants also evaluated two alternative route segments in the Route Application. One was an alternative for Segment 3. The other was the use of Segment 5a instead of Segment 5 through the City of Chaska.<sup>68</sup>

48. Applicants evaluated an alternative route segment to Segment 3 that follows along the north side of Creek Road, past the intersection with Wetzel Lane, extending approximately 0.27 mile to the northwest to the property line and then

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<sup>61</sup> Ex. 30 at 7 and Schedule 3.

<sup>62</sup> Ex. 23 at 54 (EA).

<sup>63</sup> Ex. 2 at 19, 21; Ex. 30 at 6, Schedule 2.

<sup>64</sup> Ex. 2 at 19, 22; Ex. 30 at 6, Schedule 2.

<sup>65</sup> Applicants' Public Hearing Written Comments, May 24, 2013 (E-docket No. 20135-87533-01).

<sup>66</sup> Ex. 2 at 19, 22; Ex. 30 at 6-7, Schedule 4.

<sup>67</sup> Ex. 2 at 23.

<sup>68</sup> Ex. 2 at 26-29.

extending to the north approximately 0.13 mile to the south side of Engler Boulevard where it intersects with the Route.<sup>69</sup> This alternative route segment was not selected because it would require the acquisition of additional private easements, increase the number of public road crossings, and increase the number of wetland crossings.<sup>70</sup> No stakeholders requested that this option be incorporated into the scope of the EA.<sup>71</sup>

49. The second alternative route segment in the Application contemplated rebuilding the existing 69 kV transmission line to 115 kV in Segment 5a from the Chaska Substation at the intersection of East 6<sup>th</sup> Street and North Oak Street to the intersection of 2<sup>nd</sup> Street and Beech Street. Segment 5a is proposed to be removed.<sup>72</sup> No stakeholders requested that this option be incorporated into the scope of the EA.<sup>73</sup> The City of Chaska (City) had requested that Applicants consider relocating the existing transmission line from its current location (Segment 5a), to a location further north and east toward the edge of the city.<sup>74</sup> Segment 5 of the Route was favored by the City and was selected by the Applicants because it relocates the transmission line from the center of the City to a location north and east toward the edge of the City, maximizes the use of existing transportation corridors, and minimizes the number of residential structures along the Route.<sup>75</sup>

50. One alternative route (Ernst Alternative Route Segment) and two alignment modifications (Ernst Alignment Modification 1 and Ernst Alignment Modification 2) within Segment 4 were proposed by Gene and Lorraine Ernst during the scoping process and evaluated in the EA.<sup>76</sup> The Ernsts own a commercial building in Segment 4 in downtown Chaska known as the Andrew Riedele House. It is the only building on the block and is surrounded on the north and west by Firemen's Park.<sup>77</sup> The Ernsts' principal concerns were tree trimming and removal, property valuation, and movement of the location of the new pole structure to the west after the present wooden pole is removed.<sup>78</sup>

51. The Ernst Alternative Route Segment departs from the Route at the intersection of Creek Road and Chaska Boulevard. The Route turns east at this intersection and continues along the north side of Chaska Boulevard, crossing to the south side of Chaska Boulevard at North Walnut Street, just prior to entering the existing Chaska Substation. The Ernst Alternative Route Segment continues south through the intersection of Creek Road and Chaska Boulevard for approximately 700 feet to intersect with the abandoned Union Pacific Railroad right-of-way, turning east,

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<sup>69</sup> Ex. 2 at 2.

<sup>70</sup> Ex. 2 at 27; EFP Public Hearing Written Comments (EFP Hearing Comments) at 2, May 15, 2013 (E-docket No. 20135-87062-01).

<sup>71</sup> *Id.*

<sup>72</sup> Ex. 2 at 2.

<sup>73</sup> *Id.*

<sup>74</sup> *Id.*

<sup>75</sup> Ex. 2 at 2; EFP Hearing Comments at 4.

<sup>76</sup> Ex. 23 at 7; Ex. 30 at 8.

<sup>77</sup> Ex. 13 at 5 – 17.

<sup>78</sup> Ex. 13 at 8-9.

and following this right-of-way for approximately 2,100 feet to the existing Chaska Substation.<sup>79</sup>

52. The Ernst Alternative Route Segment would create a new and longer transmission line corridor, resulting in new impacts to landowners and environmental resources.<sup>80</sup> The Ernst Alternative Route Segment crosses more floodplain than the comparable portion of Segment 4.<sup>81</sup> Further, the Ernst Alternative Route Segment has a higher number of residential and commercial properties within 26-50 feet, 51-100 feet, and 101-200 feet than the comparable portion of Segment 4.<sup>82</sup> If the Ernst Alternative Route Segment were selected, the City of Chaska does not intend to relocate or remove its existing distribution facilities on the Ernst property.<sup>83</sup>

53. The Ernst Alternative Modification 1 moves the alignment of the new 115 kV transmission line to the south side of Chaska Boulevard between Creek Road and a point approximately 100 feet west of North Chestnut Street, where the alignment would cross back to the north side of Chaska Boulevard to rejoin Applicants' proposed alignment.<sup>84</sup>

54. The Ernst Alternative Modification 1 would require siting a transmission line where none currently exists when an existing centerline is available for the Project.<sup>85</sup> This modification also has a higher number of residences located within 0-25 feet and 51-100 feet when compared against the Route.<sup>86</sup> If the Ernst Alternative Modification 1 were selected, the City of Chaska does not intend to relocate or remove its existing distribution facilities on the Ernst property.<sup>87</sup>

55. The Ernst Alternative Modification 2 would relocate a pole currently in front of the Andrew Riedele House approximately 80 feet to the west.<sup>88</sup>

56. Applicants determined that a cantilever structure, which places all of the conductors and davit arms on one side of the transmission line poles (e.g. the road side), could be installed in front of the Ernst property to maximize clearance and minimize necessary tree removal and tree trimming, although tree trimming will still be necessary due to the City of Chaska's distribution underbuild.<sup>89</sup> While Applicants are reluctant to commit to the Ernst Alignment Modification 2, they did agree to work with Mr. Ernst to determine a location further west and away from the front of the building.<sup>90</sup>

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<sup>79</sup> Ex. 23 at 24.

<sup>80</sup> Ex. 30 at 11; Findings 53, 73, and 74.

<sup>81</sup> Ex. 24 at Table 20; Ex. 30 at 11.

<sup>82</sup> *Id.*

<sup>83</sup> Ex. 30 at 11.

<sup>84</sup> Ex. 23 at 24 (EA).

<sup>85</sup> Ex. 30 at 12.

<sup>86</sup> Ex 23 at Table 23; Ex. 30 at 12.

<sup>87</sup> Ex. 30 at 11.

<sup>88</sup> Ex. 23 at 24.

<sup>89</sup> Ex. 23 at 70; Ex. 30 at 9.

<sup>90</sup> Ex. 30 at 9.

Further, Applicants agreed to identify tree species that could be planted that are more compatible with transmission line clearance requirements on the Ernst property.<sup>91</sup>

57. A number of comments were provided at the public hearing requesting that the Ernst Alternative Route Segment not be selected for the Route.<sup>92</sup>

58. Neither the Ernst Alternative Route segment nor the first Ernst alignment modification analyzed in the EA provide a more prudent or feasible route than what has been proposed in the Route Application. The Ernst Alternative Route would create a new and longer transmission line corridor. Creation of that corridor would result in adverse impacts to landowners and environmental resources, and increase Project cost unnecessarily.<sup>93</sup>

## **G. Substations**

59. Certain modifications will be made at the following four substations as part of the Project: Scott County (NSP), West Creek (City of Chaska), Victoria and Augusta (Minnesota Valley Electric Cooperative). The Chaska (City of Chaska) substation will be retired.<sup>94</sup>

## **H. Transmission Line Structure Types and Spans**

60. Single pole steel horizontal or braced post 115 kV structures are proposed for the 115 kV transmission lines. These structures are proposed to be 60 to 90 feet tall with spans of 300 to 400 feet.<sup>95</sup> In instances where the transmission line spans over water or wetlands, H-frame or Y-frame structures may be used.<sup>96</sup> The H-frame or Y-frame steel structures will be approximately 60 to 105 feet tall with spans of approximately 600 to 1,400 feet.<sup>97</sup>

## **I. Transmission Line Conductors**

61. For the Project, Applicants propose to use 795 KCmil 26/7 Aluminum Core Steel Supported (“ACSS”) cables or conductors of comparable capacity.<sup>98</sup>

## **J. Transmission Line Route Widths**

62. For the Project, Applicants requested two different route widths.<sup>99</sup> Applicants have requested a route width of 200 feet along existing transmission line

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<sup>91</sup> *Id.*

<sup>92</sup> Findings 58, 73, and 74; *See also*, Public Hearing Tr. and Tr. Ex. A.

<sup>93</sup> Ex. 30 at 10.

<sup>94</sup> Ex. 2 at 29-31, Appendix F; Ex. 30 at 4.

<sup>95</sup> Ex. 2 at 31.

<sup>96</sup> Ex. 2 at 32.

<sup>97</sup> *Id.*

<sup>98</sup> Ex. 2 at 33.

<sup>99</sup> Ex. 2 at 24.

route segments (Segments 1, 2, 4, and 6).<sup>100</sup> Applicants requested a route width of 400 feet where new transmission line segments are proposed to be constructed (Segments 3 and 5).<sup>101</sup> The City of Chaska requested that the route width requested by Applicants at the intersection of Highway 212 and County Road 140, where Segments 3 and 4 connect, be revised to accommodate routing of the Project around a proposed interchange.<sup>102</sup>

## **K. Transmission Line Right-of-Way**

63. Where Applicants propose to construct the Project along the existing 69 kV transmission line, the existing centerline and the existing right-of-way, the majority of which is 50 feet wide, will be maintained where reasonably practical (Segments 1, 4, and 6).<sup>103</sup> Where Applicants propose to construct new segments of the Project (Segment 3 and Segment 5), a right-of-way width of 75 feet is requested.<sup>104</sup> No additional right-of-way will be required for Segment 2.<sup>105</sup>

## **L. Project Schedule**

64. Applicants expect to begin construction on the Project soon after permits are obtained, and complete the Project by fall 2014.<sup>106</sup>

## **M. Project Costs**

65. Applicants estimate that the overall cost of the Project will fall within a range of \$13 million and \$27 million.<sup>107</sup>

66. Operating and maintenance costs for the Route will be nominal for several years because the transmission line will be new and vegetation management of the right-of-way will occur prior to construction.<sup>108</sup> Applicants estimate that annual operating and maintenance costs will fall within the average transmission right-of-way costs for the Upper Midwest of \$300 to \$500 per mile.<sup>109</sup>

## **N. Summary of Public Comments**

### ***a. Public Comments at the EA Scoping Meeting***

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<sup>100</sup> *Id.*

<sup>101</sup> *Id.*

<sup>102</sup> City of Chaska Public Hearing Comment Letter, May 28, 2013 (E-docket No. 20135-87533-01).

<sup>103</sup> Ex. 2 at 2.

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> Ex. 2 at 14; Ex. 30 at 8.

<sup>107</sup> Ex. 2 at 14.

<sup>108</sup> Ex. 2 at 15.

<sup>109</sup> *Id.*

67. Five individuals took the opportunity to speak at the EFP public meeting on September 26, 2012.<sup>110</sup> A variety of questions were asked and answered on a variety of topics during an oral discussion. Those topics included specifics on which lines and poles will be removed, the design and construction of new poles, specifics on the proposed alignment, the concepts of route width and right-of-way/easement width, sources of power generation for the Project, health and safety issues, property values, compensation for easements, and flexibility in siting the final alignment.<sup>111</sup>

b. Written Public Comments at EA Scoping Stage

68. Additionally, two members of the public, Gene and Lorraine Ernst (the Ernsts), submitted comments in writing to the EFP on October 8, 2012.<sup>112</sup>

69. In their letter, the Ernsts requested that the EA include the Ernst Alternative Route Segment, the Ernst Alignment Modification 1, and the Ernst Alignment Modification 2.<sup>113</sup>

c. Written Public Comments at the Hearing stage

70. Chair Gayle Degler, on behalf of St. John's Lutheran Church, submitted a written public comment that was received May 13, 2013. The written comment supported removal of the existing 69 kV transmission facilities along Segment 5a.<sup>114</sup>

71. Mr. Mike Senden, President and CEO of Auburn Homes and Services, provided a written comment on May 13, 2013 supporting the Route and removal of the 69 kV transmission facilities along Segment 5a.<sup>115</sup>

d. Public Hearing Comments

72. At the commencement of the May 2, 2013 public hearing, there were brief presentations describing the Project from the following individuals: Ms. Tricia Debleeckere, on behalf of the Public Utilities Commission; Mr. Bill Storm, representing the Department of Commerce EFP staff; and Ms. Sage Tauber, representing Xcel Energy. During the presentations, questions were entertained by the presenters, as well as the following individuals: Mr. Jeff Putzman, Transmission Engineer for Excel Engergy; and Mr. Chris Rogers, a Land Agent for Xcel Energy.<sup>116</sup>

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<sup>110</sup> Public Comments on Scope of EA, Ex. 12 (E-docket no. 201210-79620-1); Ex. 18 at 4.

<sup>111</sup> *Id.*

<sup>112</sup> Ex. 13 at 5 – 17.

<sup>113</sup> Ex. 13 at 8-9.

<sup>114</sup> St. John's Lutheran Church Public Hearing Written Comment, May 13, 2013 (E-docket No. 20135-87533-04).

<sup>115</sup> Auburn Homes & Services Public Hearing Written Comment, May 13, 2013 (E-docket No. 20135-87533-03).

<sup>116</sup> May 2, 2013, Public Hearing Transcript (Tr.); Ex. 35.

73. Ms. Helen Kowalski, of Chaska, expressed opposition to the Ernst Alternative because she believes it would unnecessarily affect many residences. She also expressed safety concerns regarding power line poles along the Ernst Alternative.<sup>117</sup>

74. Mike and Colleen Harder of Chaska expressed concerns that the Ernst Alternative would result in possible eminent domain proceedings that would affect their home, because of the alignment of the Ernst Alternative along the Chaska dike system.<sup>118</sup>

75. Ms. Susan Cross expressed concerns about the alignment along Segment 5 with regard to aesthetics and tree removal in the area of the Carver County courthouse.<sup>119</sup>

76. Mr. Troy Wiebe expressed concerns similar to those of Ms. Cross about Segment 5, as well as its effect on property values along that segment. He also questioned the need for changing the route from Segment 5a to 5.<sup>120</sup>

77. Mr. Cal Haasken had a question about the scope of easements along the West Creek Tap Line, near the north terminus of Segment 3. The ALJ advised Mr. Haasken to put his question in writing because the West Creek Substation and Tap Line are not part of this proceeding.<sup>121</sup>

78. Mr. Norm Glock, of Chaska, inquired about the timing the removal of the lines and structures within Segment 5a as those issues affect St. John's church, as well as whether the Xcel easements along Segment 5a would be released.<sup>122</sup>

79. Owners of 13 homes along the Ernst Alternative Route signed a petition, circulated by Ms. Kowalski and submitted at the hearing, in opposition to the Ernst Alternative Route.<sup>123</sup>

80. At the close of public hearing May 2, 2013, Mr. Ernst took the opportunity to speak, stating that he is comfortable with the Applicant's Route, hopeful that the Applicants' will mitigate tree trimming and will work with him to move the pole in front of his building 80 feet to the west.<sup>124</sup>

81. No members of the public questioned whether a Certificate of Need for the Project should be issued.

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<sup>117</sup> Tr. at 20-23, 46 and Tr. Ex. B.

<sup>118</sup> Tr. at 36-40, 43-46.

<sup>119</sup> Tr. at 51-52.

<sup>120</sup> Tr. at 52-53.

<sup>121</sup> Tr. at 59-60.

<sup>122</sup> Tr. At 64-67.

<sup>123</sup> Tr. Ex. A.

<sup>124</sup> Tr. at 69.

## O. Local Government Participation

82. Xcel Energy met with City of Chaska (City) and Carver County officials early on in the Project planning stage and on several other occasions to discuss the Project.<sup>125</sup>

### City of Chaska's May 24, 2013 Comments

83. On May 28, 2013, the City of submitted written comments on the Project. In its letter, Chaska provided 11 specific comments.<sup>126</sup>

84. For Segment 3, Chaska requested that (1) any easement for the Route along Creek Road be outside an expanded road right-of-way that the City is in the process of acquiring; and (2) the final alignment in the area near the intersection of Creek Road and Highway 212 be worked out with the City of Chaska to minimize environmental impacts to the adjacent creek and wooded slopes.<sup>127</sup>

85. In the area of the intersection of County Road 140 and Highway 212, near the connection of Segments 3 and 4, the City proposes a revised route width to accommodate routing of the Project around a proposed highway interchange at that intersection. The revision is intended to avoid future transmission line rerouting when the interchange is constructed.<sup>128</sup>

86. The City's proposed beginning point of Segment 3, on the east side of Highway 212, rather on the west side, would have the new transmission line crossing County 140 diagonally.<sup>129</sup> Such a diagonal crossing would not be permitted by the Minnesota Department of Transportation (MnDOT).<sup>130</sup>

87. For Segment 3a, the City requested that instead of being allowed to abandon in place the 69 kV transmission line, Applicants be required to remove the transmission line to avoid conflicts with street improvements.<sup>131</sup>

88. Along Segment 4, the city provided the following comments: (1) that any easement for the Route along County Road 140 between County State Aid Highway 11 and the Guardian Angels Cemetery be outside the proposed expanded road right-of-way; (2) that the City supports the realignment proposed by Applicants from the existing 69 kV transmission line centerline at Creek Lane; (3) that the City proposes the Route along Creek Road north of Chaska Boulevard be moved to the west side of Creek

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<sup>125</sup> Ex. 2 at 27.

<sup>126</sup> City of Chaska Public Hearing Comment Letter, May 24, 2013 (E-docket No. 20135-87533-01).

<sup>127</sup> *Id.*

<sup>128</sup> *Id.*

<sup>129</sup> Compare Exhibit A of Applicants' Post Hearing Reply Brief to Exhibit A of the City's Public Hearing Comment Letter, May 24, 2013 (E-docket No. 20135-87533-01)).

<sup>130</sup> Ex. 13 at 6.

<sup>131</sup> *Id.*



Road; and (4) that the city does not intend to relocate its distribution line underbuild adjacent to the Ernst property.<sup>132</sup>

89. With specific regard to City comment (1) above, the standard permit language regarding process to modify the transmission line alignment after issuance of the Route Permit and the requirement for Applicants to maximize use of existing road right-of-way should be sufficient to allow Applicants to work with the City on designing the final alignment in that area.<sup>133</sup>

90. With specific regard to City comment (3) above, the City's request would require the acquisition of new rights-of-way, which would need to be 75 feet in width in this area. It would also impact one new landowner.<sup>134</sup> There are also engineering and design concerns related to the concrete flood channel along Creek Road. Based on site observations by Project engineers, it appears there is not adequate space to construct a structure foundation on the west side of Creek Road between the street and the existing concrete flood channel without adversely impacting that channel and buried utilities.<sup>135</sup>

91. Along Segment 5, the City requested that the final alignment of the Route from 6<sup>th</sup> Street to Beech Street be worked out between the City and the Applicants.<sup>136</sup>

92. The City also: (1) stated that it supports the Applicants' proposal to remove the 69 kV transmission facilities along Segment 5a; (2) requested that Applicants "relinquish rights to any transmission line easements" along the existing 69 kV transmission in Segment 5a if the Project is constructed along Segment 5; and (3) stated that it intends to remove its distribution lines along this segment.<sup>137</sup>

93. If Segment 5 is selected for the Route, Xcel Energy intends to release the easements along Segment 5a.<sup>138</sup>

#### City of Chaska's June 19, 2013 Comments

94. On June 19, 2013, the City of submitted additional written comments in response to the Post-Hearing Arguments/Analysis of the Department of Commerce EFP staff. In its letter, the City had material comments related to two segments.<sup>139</sup>

95. The City further explained the reasons for its suggestion that the Segment 3a transmission facilities be removed, rather than abandoned in place. The City is in the

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<sup>132</sup> *Id.*

<sup>133</sup> EFP Post hearing Arguments/Analysis Comments (EFP Comments), June 7, 2013 (E-docket No. 20136-879-01 and 20136-87953-02).

<sup>134</sup> Ex. 2 at 35.

<sup>135</sup> Applicants' Post-Hearing Brief at 15, June 7, 2013 (E-docket No. 20136-87965-04 and 20136-87964-04).

<sup>136</sup> *Id.*

<sup>137</sup> City of Chaska Public Hearing Comment Letter, May 28, 2013 (E-docket No. 20135-87533-01).

<sup>138</sup> Applicants' Public Hearing Written Comments, May 24, 2013 (E-docket No. 20135—87533-01).

<sup>139</sup> City of Chaska Post-Hearing Comment Letter, June 19, 2013 (E-docket No. 20137-89183-01).

process of acquiring an additional seventeen feet of right-of-way (ROW) on both sides of County Road 140. This will expand its ROW from 66 to 100 feet to accommodate improvements necessary to widening of the road. The improvements are necessary to service three newly approved residential developments, totaling 117 acres, on the east side of Highway 212 and along County Road 140, as shown in an attached County Road 140 Area Plan.<sup>140</sup>

96. Concerning Segment 4, the City expanded on the status of a new interchange at Highway 212 and County Road 140. Together with its letter, the City provided the written approval of MnDOT for the interchange, in accordance with an amendment to the City's Comprehensive Plan. On January 28, 2013, the City amended its Comprehensive Plan as requested by the DOT. The amended Comprehensive Plan is in the process of being forwarded to the Metropolitan Council for its approval.<sup>141</sup>

## **P. State Agency Participation**

### Minnesota Department of Natural Resources

97. Xcel Energy submitted a formal review request to the Minnesota Department of Natural Resources (DNR) on March 14, 2011, to determine whether rare plants, animals, natural communities, or other significant natural features were known to occur within the Project area.<sup>142</sup>

98. MnDNR replied on May 4, 2011 that there are 32 known occurrences of rare species and sensitive natural communities within 1.5 miles of the Route.<sup>143</sup>

99. On October 11, 2012 the DNR submitted written comments requesting a more detailed discussion regarding potential impacts, avoidance, and mitigative measures for the Project's proposed construction in public waters and wetlands and through the Central Region Regionally Significant Ecological Area.<sup>144</sup>

100. The DNR also requested shapefiles of the Route to review proposed placement of bird flight diverters, and recommended that the EA include "invasive species management plans."<sup>145</sup>

101. Additionally, the DNR recommended that wildlife friendly erosion control mesh be used as a mitigation measure in areas used by amphibians and other wildlife such as wetlands and near water crossings.<sup>146</sup>

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<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

<sup>142</sup> Ex. 2 at 86.

<sup>143</sup> Ex. 2 at 87.

<sup>144</sup> Ex. 13 at 1-2.

<sup>145</sup> *Id.*

<sup>146</sup> *Id.*

102. On May 24, 2013, the DNR submitted written comments on the EA, including its October 11, 2012 comments. The DNR recommended, after review of the requested shapefiles, two additional bird flight diverter locations near Structure 142, the beginning of Segment 1, and near the midpoint of Segment 3, and that “plans for invasive species management be included in project route permit compliance filings or other appropriate project plans.”<sup>147</sup>

Minnesota Department of Transportation

103. MnDOT submitted written comments on October 12, 2012. MnDOT requested to “participate in the development of the EA so that it will contain a thorough evaluation of the effects various route proposals may have on the state transportation system.”<sup>148</sup>

104. MnDOT provided information on MnDOT’s Utility Accommodation Policy, stating that the policy requires that the Project be located “outside the control-of-access lines when paralleling” Highway 212, and expressed a “continuing interest in working with the Applicants to ensure that possible impacts to highways ... are adequately addressed.”<sup>149</sup>

105. In addition, MnDOT noted that the relocation of the access to the Chaska Substation will require an extension of Bonnevista Drive in Jackson Township. In turn, MnDOT noted that the transmission lines should be placed in a way that will accommodate this road extension.<sup>150</sup>

Metropolitan Council

106. The Metropolitan Council provided comments on May 16, 2013, noting that the Route “may have the potential to impact Council wastewater interceptors that cross the proposed Project route” and requested an opportunity to review design plans before initiating construction of the Project.<sup>151</sup>

107. No governmental entity presented argument or evidence opposing the issuance of a Certificate of Need for the Project.

**Q. Route Permitting Statutes and Rules**

108. The Power Plan Siting Act requires that route permit determinations “be guided by the state’s goals to conserve resources, minimize environmental impacts, minimize human settlement and other land use conflicts, and ensure the state’s electric energy security through efficient, cost-effective power supply and electric transmission

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<sup>147</sup> DNR Public Hearing Written Comments, May 24, 2013 (E-docket No. 20135-87404-01).

<sup>148</sup> Ex. 13 at 5-6.

<sup>149</sup> *Id.*

<sup>150</sup> *Id.*

<sup>151</sup> Metropolitan Council Public Hearing Comment Letter, May 16, 2013 (E-docket No. 20135-87533-02).

infrastructure.”<sup>152</sup> The statute then identifies twelve criteria for the Commission to consider when making a route designation:

- (1) evaluation of research and investigations relating to the effects on land, water and air resources of large electric power generating plants and high-voltage transmission lines and the effects of water and air discharges and electric and magnetic fields resulting from such facilities on public health and welfare, vegetation, animals, materials and aesthetic values, including baseline studies, predictive modeling, and evaluation of new or improved methods for minimizing adverse impacts of water and air discharges and other matters pertaining to the effects of power plants on the water and air environment;
- (2) environmental evaluation of sites and routes proposed for future development and expansion and their relationship to the land, water, air and human resources of the state;
- (3) evaluation of the effects of new electric power generation and transmission technologies and systems related to power plants designed to minimize adverse environmental effects;
- (4) evaluation of the potential for beneficial uses of waste energy from proposed large electric power generating plants;
- (5) analysis of the direct and indirect economic impact of proposed sites and routes including, but not limited to, productive agricultural land lost or impaired;
- (6) evaluation of adverse direct and indirect environmental effects that cannot be avoided should the proposed site and route be accepted;
- (7) evaluation of alternatives to the applicant’s proposed site or route proposed pursuant to subdivision 1 and 2;
- (8) evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way;
- (9) evaluation of governmental survey lines and other natural division lines of agricultural land so as to minimize interference with agricultural operations;
- (10) evaluation of future needs for additional high-voltage transmission lines in the same general area as any proposed route, and the advisability of ordering the construction of structures capable of

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<sup>152</sup> Minn. Stat. § 216E.03, subd. 7.

expansion in transmission capacity through multiple circuiting or design modifications;

- (11) evaluation of irreversible and irretrievable commitments of resources should the proposed site or route be approved; and
- (12) when appropriate, consideration of problems raised by other state and federal agencies and local entities.<sup>153</sup>

109. In addition, Minn. Stat. § 216E.03, subd. 7(e) provides that the Commission “must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the [C]ommission must state the reasons.”

110. Additionally, by rule, the Commission has established a set of evaluation factors that mirror the criteria established by Minn. Stat. § 216E.03, subd. 7 (b). The Commission is to consider the:

- A. effects on human settlement, including, but not limited to, displacement, noise, aesthetics, cultural values, recreation, and public services;
- B. effects on public health and safety;
- C. effects on land-based economies, including, but not limited to, agriculture, forestry, tourism, and mining;
- D. effects on archaeological and historic resources;
- E. effects on the natural environment, including effects on air and water quality resources and flora and fauna;
- F. effects on rare and unique natural resources;
- G. application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- H. use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries;
- I. use of existing large electric power generating plant sites;

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<sup>153</sup> Minn. Stat. § 216E.03, subd. 7(b).

- J. use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- K. electrical system reliability;
- L. costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- M. adverse human and natural environmental effects which cannot be avoided; and
- N. irreversible and irretrievable commitments of resources.<sup>154</sup>

**R. Analysis of Applicants' Route Under Commission Routing Factors (Minn. R. 7850.4100):**

**1. Effects upon Human Settlement**

111. The land within the Project area is residential, commercial, industrial, forested, and open lands, and includes existing road and utility corridors.<sup>155</sup>

112. The Commission's consideration of the effects on human settlement includes displacement of homes by the Project, noise from the construction and operation of the Project, and the Project's impacts on aesthetics, cultural values, recreation, and public services.

113. After the public hearing, the City of Chaska requested that the Route width be revised along Segment 3 near the intersection of Highway 212 and County Road 140 to accommodate a planned interchange at this intersection.<sup>156</sup>

114. The overall effects on human settlement along the Route will be minimal.

(i) Displacement

115. No residential or business displacement will occur as a result of the Project as proposed.<sup>157</sup>

(ii) Noise

116. The Minnesota Pollution Control Agency ("MPCA") has established standards for the regulation of noise levels.<sup>158</sup>

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<sup>154</sup> Minn. R. 7850.4100 (2009).

<sup>155</sup> Ex. 2 at 5.

<sup>156</sup> City of Chaska Public Hearing Comment Letter (City Hearing Comments) at Exhibit A, May 28, 2013 (E-docket No. 20135-87533-01).

<sup>157</sup> Ex. 2 at 59.

<sup>158</sup> Ex. 2 at 61.

117. For residential, commercial, and industrial land, the MPCA noise limits are 60-65 A-weighted decibel (“dBA”) during the daytime and 50-55 dBA during the nighttime.<sup>159</sup>

118. Transmission lines produce noise under certain conditions. The level of noise depends on conductor conditions, voltage level, and weather conditions. Generally, activity related noise levels during the operation and maintenance of transmission lines are minimal and do not exceed the MPCA noise limits outside the right-of-way.<sup>160</sup>

119. The audible noise levels for the Route are not predicted to exceed the MPCA noise limits.<sup>161</sup>

(iii) Aesthetics

120. Construction of the Project will occur adjacent to existing road rights-of-way and within an area already populated by transmission lines and structures; therefore, the Project will have nominal effects on aesthetics.<sup>162</sup>

121. The proposed structures for the 115 kV transmission line will be similar to the other 115 kV transmission lines used on the Xcel Energy system and in the area. The structures will be between 60 and 105 feet tall and will have an average span of 325 feet.<sup>163</sup> The finish of the proposed poles will be self-weathering or galvanized steel.<sup>164</sup> The proposed galvanized steel poles will give the new transmission line a cleaner and more modern appearance while self-weathering steel poles have a greater propensity to blend in with wooded areas.<sup>165</sup>

122. Like the existing 69 kV transmission line, the new and rebuild segments of 115 kV single circuit transmission line will be visible throughout the general area surrounding the Route. The landscape in the vicinity of the Route is a mix of rural residential development, agricultural land, open space, and urban commercial and residential development. The visual effect will depend largely on the perceptions of the observers across these various landscapes. The visual contrast added by the transmission structures and lines may be perceived as a visual disruption or as points of visual interest. The transmission lines and substations that already exist in the vicinity of the proposed Project will limit the extent to which the new line construction and upgraded transmission line is viewed as a disruption to the area’s scenic integrity.<sup>166</sup>

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<sup>159</sup> Ex. 2 at 62.

<sup>160</sup> *Id.*

<sup>161</sup> Ex. 2 at 62 and 64.

<sup>162</sup> Ex. 2 at 65.

<sup>163</sup> *Id.*

<sup>164</sup> *Id.*

<sup>165</sup> *Id.*

<sup>166</sup> Ex. 2 at 66.

(iv) Cultural Values

123. The region surrounding the Project area has cultural values tied to the area's strong German and Scandinavian heritage, and the agricultural and industrial economies.<sup>167</sup>

124. No material impacts to cultural values are anticipated from the Project.<sup>168</sup>

(v) Recreation and Tourism

125. Recreational opportunities within or abutting the Route include Minnesota Valley State Recreational Area, Schimelpenig Park, Fireman's Park I, Fireman's Park II, and Highland Park.<sup>169</sup> Primary tourism activities in the region include camping, recreational use of lakes for fishing and boating, and trails.<sup>170</sup>

126. In a letter mailed on May 28, 2013, the City of Chaska expressed concern about the routing along Segment 5 near the City park (Fireman's II).<sup>171</sup> To accommodate this concern, Applicants request that no alignment be identified in the Route Permit for Segment 5 so Applicants and the City can develop an alignment for the Project that addresses the City's concerns along this segment.<sup>172</sup>

127. The Project will be visible from Aue Lake, Fireman's Clayhole, Courthouse Clayhole, and the Minnesota River. However direct impact to these resources is not anticipated. If impacts to these resources are encountered during construction of the Project, Applicants will work with the appropriate representatives to minimize impacts.<sup>173</sup> Schimelpenig Park, Fireman's Park I, Fireman's Park II, Highland Park, and the Minnesota Valley State Recreational Area are within the Route width.<sup>174</sup> Segment 5 crosses Fireman's Park II near Maple Street.<sup>175</sup> No significant impacts to these parks and recreation areas are anticipated as a result of the Project.<sup>176</sup>

128. No material impacts to recreation are anticipated as a result of the Project.

(vi) Public Services and Infrastructure

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<sup>167</sup> Ex. 2 at 68.

<sup>168</sup> *Id.*

<sup>169</sup> Ex. 2 at 69.

<sup>170</sup> Ex. 2 at 70.

<sup>171</sup> City Hearing Comments.

<sup>172</sup> Applicants' Public Hearing Written Comments, May 24, 2013 (Applicant's Hearing Comments) (E-docket no. 20135-87419-01).

<sup>173</sup> Ex. 2 at 70.

<sup>174</sup> Ex. 2 at 69.

<sup>175</sup> Ex. 23 at 48.

<sup>176</sup> Ex. 2 at 69.



129. The City of Chaska provides water, sewer and electrical service to its residents. Outside the city limits, along the transmission route, private wells and septic systems are used.<sup>177</sup>

130. The Metropolitan Council provided comments on May 16, 2013, noting that the Route “may have the potential to impact Council wastewater interceptors that cross the proposed Project route” and requested an opportunity to review design plans before initiating construction of the Project.<sup>178</sup> Applicants will provide preliminary design plans to the Metropolitan Council before commencing construction to ensure that there are no impacts to wastewater interceptors.<sup>179</sup>

131. The City of Chaska requested in its May 28, 2013 written comments on Segment 3a, that instead of abandoning the existing 69 kV transmission facilities along County Road 140 east of Guernsey Avenue, that Applicants remove these facilities as part of the Project “to avoid conflicts with street improvements.”<sup>180</sup> Abandoning in place means that the existing 69 kV transmission line will be left in its current location with the conductors de-energized and not connected to the transmission system.<sup>181</sup>

132. The City of Chaska has identified specific plans related to street improvements along County Road 140 between Guernsey Avenue and Highway 212.<sup>182</sup>

133. The Applicants have not articulated a reason for abandoning in place the existing 69 kV transmission facilities of Segment 3a. The EA describes the abandonment in place of Segment 3a as “de-energized under normal conditions.”<sup>183</sup> This suggests that there may be “abnormal conditions” under which Segment 3a would be re-energized.

## 2. Effects on Public Health and Safety

134. Applicants have committed to build and operate Project facilities in compliance with the requirements of the National Electrical Safety Code (NESC), Occupational Safety and Health Act (OSHA), and other applicable federal, state and local regulations. The Applicants have made a detailed description of the procedures they will follow in building, operating, and maintaining the transmission line a part of this hearing record.<sup>184</sup>

135. The possible impact of electric and magnetic field (“EMF”) exposure on human health has been investigated by public health professionals for the past three decades. Epidemiological and toxicological studies have shown only weak associations

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<sup>177</sup> Ex. 2 at 71.

<sup>178</sup> Metropolitan Council Public Hearing Comment Letter, May 16, 2013 (E-docket No. 20135-87533-02).

<sup>179</sup> Applicants’ Public Hearing Comments.

<sup>180</sup> City Hearing Comments.

<sup>181</sup> Ex. 23 at 1.

<sup>182</sup> Findings 94 - 96.

<sup>183</sup> *Id.*

<sup>184</sup> Ex. 2 at 33, 44-47, 51, 53, 57.

between magnetic field exposure and health risks and none has established a causal relationship.<sup>185</sup>

136. The general consensus is that electric fields pose no human risk.<sup>186</sup>

137. There is no federal standard for transmission line electric or magnetic fields.<sup>187</sup> However, the Commission has imposed a maximum electric field limit of 8 kV/m measured at one meter above the ground at the edge of the right-of-way.<sup>188</sup>

138. The Applicants have satisfied the applicable standards for protecting the public's health and safety with respect to EMF. The Project will have a peak magnitude of electric field density of approximately 1.48 kV/m 25 feet from the proposed centerline for H-Frame or Y-Frame single circuit steel poles. EMF for all other structure types, at the point directly underneath the conductors at one meter above ground level ranges from 0.23 to 0.63, all significantly less than the 8.0 kV limit imposed by the Commission.<sup>189</sup>

139. Applicants have committed to take all appropriate measures to prevent stray voltage problems in areas where the transmission lines on the Route are parallel to or cross distribution lines.<sup>190</sup>

### 3. Effects on Land-Based Economies and Indirect Economic Impacts

140. Minnesota's high voltage transmission line routing criteria require consideration of the Project's impacts to land-based economies, specifically agriculture, forestry, tourism, and mining.<sup>191</sup> Residential development has increased over the prior half century along the eastern portion of Segment 4.<sup>192</sup>

#### i. Agriculture

141. Land use along Route Segments 1 through 3 is primarily agricultural and undeveloped open space. There are no farmsteads or residences within 25 feet of the anticipated alignment along the entire Route. There are no farmsteads within 50 feet of the anticipated alignment along Segments 1 through 3.<sup>193</sup>

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<sup>185</sup> Ex. 2 at 54-57.

<sup>186</sup> *Id.*

<sup>187</sup> Ex. 2 at 48.

<sup>188</sup> *Id.*; See also, *In Re Route Permit App. For a 345 kV Transmission line from Brookings County, SD to Hampton, MN*, Docket No. ET-2/TL-08-1474, Order Granting Route Permit (adopting ALJ findings of Fact, conclusions and Recommendation at Finding 194 (April 22, 2010, and amended April 30, 2010) (September 14, 2010).

<sup>189</sup> Ex. 2 at 48-49, and Table 8 at 49.

<sup>190</sup> Ex. 2 at 50.

<sup>191</sup> Minn. Stat. § 216E.03, subd. 7(b)(5); Minn. R. 7850.4100(C).

<sup>192</sup> Ex. 2 at 58.

<sup>193</sup> *Id.*

142. Residential development has increased over the prior half century along the eastern portion of Segment 4.<sup>194</sup> The remaining portion of Segment 4 and all of Segment 5 have been developed urban residential and commercial areas of the City of Chaska for decades.<sup>195</sup>

(ii) Mining

143. Segment 6, through the Minnesota River Valley, is primarily undeveloped with the exception of some private land parcels in Scott County where agriculture and mining have occurred.<sup>196</sup> Three active aggregate sources and four inactive sources are located within one mile of the Project. However, no existing gravel and rock resources are being utilized within the Route.<sup>197</sup>

(iii) Tourism

144. There are several tourist attractions located in the Project area. The Minnesota River Valley offers multiple opportunities for outdoor recreation. Primary tourism activities in the region including camping, fishing, boating, bicycling, and cross country skiing.<sup>198</sup>

(iv) Forestry

145. The record shows no forested land within the Project area.

146. No impacts to land-based economies are anticipated as a result of the Project.<sup>199</sup>

#### 4. Effects on Archaeological and Historic Resources

147. Minnesota Rule 7850.4100(D) requires consideration of the effects on historic and archaeological resources.

148. A “Phase Ia” background research/literature review for the Project was completed in February 2011 at the Minnesota State Historic Preservation Office (“SHPO”). This review indicated that there are 20 archaeological sites within one mile of the Project area.<sup>200</sup> Three archaeological sites are located within the Route but are external to the proposed alignment and are not likely to experience direct impacts resulting from construction of the Project.<sup>201</sup>

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<sup>194</sup> Ex. 2 at 59, Table 10.

<sup>195</sup> Ex. 2 at 58.

<sup>196</sup> *Id.*

<sup>197</sup> Ex. 2 at 7.

<sup>198</sup> *Id.*

<sup>199</sup> *Id.*

<sup>200</sup> Ex. 2 at 75.

<sup>201</sup> Ex. 2 at Appendix I.

149. The review also identified 293 cultural resource properties within one mile of the Route. Only 43 of these identified properties are within the Route width, excluding the route width expansion proposed by the City of Chaska for which specific resource review has not been completed. Segments 1, 4, and 6 have no documented cultural resource properties within the one-mile buffer. Segment 2 has four identified properties, but no construction activities will occur along this segment. Segment 3 has one cultural resource property. Segment 5, through the City of Chaska, has 37 identified cultural resource properties. None of the 43 properties within the Route width have been formally evaluated or considered for eligibility for listing on the National Register of Historic Places.<sup>202</sup>

150. No impacts to archaeological or historic resources are anticipated as a result of construction of the Project along the Route.<sup>203</sup>

## 5. Effects on Natural Environment

151. Minnesota's high voltage transmission line routing criteria require consideration of the proposed route's effect on the natural environment, including effects on air and water quality resources and flora and fauna.<sup>204</sup>

### (i) Air Quality

152. The construction of the Project will result in the emission of air pollutants from construction equipment and the release of fugitive dust from disturbing soil. This impact is temporary. Concentrations of ozone from the operation of the Project would be *de minimus* and have a negligible impact on air quality.<sup>205</sup>

153. Applicants will employ Best Management Practices (BMPs) to minimize the amount of fugitive dust created by the construction process. Tracking control at access roads and wetting surfaces are examples of BMPs that will be used to minimize fugitive dust.<sup>206</sup>

### (ii) Water Quality and Resources

154. The Route crosses the 100-year floodplains of Chaska Creek and the Minnesota River and the 500-year floodplain of the Minnesota River in Carver County.<sup>207</sup>

155. The Route crosses MnDNR Public Water Inventory ("PWI") public waters and watercourses. The route width intersects two public waters (Fireman's Clayhole

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<sup>202</sup> *Id.*

<sup>203</sup> Ex. 2 at 75.

<sup>204</sup> Minn. Stat. §§ 216E.03, subd. 7(b)(1) and (2); Minn. R. 7850.4100(E).

<sup>205</sup> Ex. 2 at 76-77.

<sup>206</sup> Ex. 2 at 77.

<sup>207</sup> *Id.* The 500-year floodplain data are not available for Scott County.

and Aue Lake) and two watercourses and tributaries (Chaska Creek and Minnesota River).<sup>208</sup>

156. Various large wetland complexes and small isolated wetlands are scattered along the Route. National Wetlands Inventory data were reviewed to assess wetlands within the proposed route width. In total, 26 separate wetlands consisting of 14 different wetland types were identified within the route width.<sup>209</sup>

157. The Project's temporary impacts to water resources could include some sedimentation reaching surface waters during construction due to ground disturbance by excavation, grading, construction traffic, and dewatering of holes drilled for transmission structures. Impacts to water resources will be avoided and minimized by implementing appropriate sediment control practices and best management practices. Applicants will endeavor to minimize permanent impacts to wetlands and drainage systems by spanning wetlands and drainage systems, where possible.<sup>210</sup>

158. Due to potential impacts to these water resources, Applicants may be required to obtain approvals under various federal and state regulations including the Minnesota Wetland Conservation Act ("WCA").<sup>211</sup> The Project may require wetland and water resource approvals from the US Army Corps of Engineers, MnDNR, and Local Government Units.<sup>212</sup>

(iii) Flora

159. Transmission lines have the potential to impact vegetation primarily through removal or disturbance required for construction and safe operation of the line.<sup>213</sup>

160. The primary objective of Applicants' vegetation management procedure is to keep transmission facilities clear of tall growing trees, brush, and other vegetation that could grow close to conductors. Whenever feasible, Applicants try to manage vegetation within the right-of-way using the wire zone/border zone concept.<sup>214</sup>

161. This concept allows for different, yet compatible, vegetation types in separate zones. The wire zone, directly beneath the conductors, consists of low growing forbs and grasses. The border zone begins at the outside edge of the wire zone and extends to the edge of the right-of-way. The border zone may contain additional low growing woody plants and trees. As a result, the majority of vegetation clearing for the proposed Project will occur within Applicants' right-of-way. The exception to that rule is that large hazard trees, such as diseased or dead trees, located

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<sup>208</sup> Ex. 2 at 79 - 80.

<sup>209</sup> Ex. 2 at 78.

<sup>210</sup> Ex. 2 at 81-82.

<sup>211</sup> Ex. 2 at 81.

<sup>212</sup> *Id.*

<sup>213</sup> Ex. 2 at 40-47.

<sup>214</sup> *Id.*

outside the right-of-way may be removed if they pose a risk of falling onto the transmission lines.<sup>215</sup>

162. Among many other practices that Applicants will follow to minimize vegetation impacts, Applicants will construct the Project during the winter construction season to the extent practicable. When construction during frozen winter conditions is not possible, construction mats will be used.<sup>216</sup>

163. In its May 24, 2013 letter, MnDNR recommended that “plans for invasive species management be included in project route permit compliance filings or other appropriate project plans.”<sup>217</sup> Applicants will work with MnDNR to prepare an invasive species management plan for the Project that incorporates current best management practices.<sup>218</sup>

(iv) Fauna

164. The Route is located approximately 0.5 mile north of the Minnesota Valley National Wildlife Refuge, which is a resting area for migratory birds and waterfowl.<sup>219</sup>

165. Raptors, waterfowl, and other bird species could be impacted by the Project through collision with transmission line conductors.<sup>220</sup>

166. The electrocution of large birds, such as raptors, is more commonly associated with small distribution lines than large transmission lines.<sup>221</sup> In addition, Applicants’ transmission line and distribution line design standards provide adequate spacing to eliminate the risk of electrocution of large birds.<sup>222</sup>

167. Applicants will install Swan Flight Diverters (“SFDs”), which are pre-formed spiral shaped devices on the shield wire in the locations identified in the Application.<sup>223</sup>

168. As requested by MnDNR, SFDs will be installed in the locations identified in Appendix B.2 and the additional locations identified in the May 24, 2013 MnDNR letter.<sup>224</sup>

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<sup>215</sup> *Id.*

<sup>216</sup> Ex. 2 at 41.

<sup>217</sup> MnDNR Public Hearing Written Comments (MnDNR Hearing Comments), May 24, 2013 (E-docket No. 20135-87404-01).

<sup>218</sup> *Id.* at 203.

<sup>219</sup> Ex. 2 at 83.

<sup>220</sup> Ex. 2 at 84.

<sup>221</sup> *Id.*

<sup>222</sup> *Id.*

<sup>223</sup> Ex. 2 at 85; Ex. 21 (Corrected Maps Appendix B.1 and B.2).

<sup>224</sup> MnDNR Hearing Comments.

169. No significant impacts to the natural environment are anticipated to result from construction of the Project.

## 6. Effects upon Rare and Unique Natural Resources

170. Minnesota's high voltage transmission line routing criteria require consideration of the proposed route's effect on rare and unique natural resources.<sup>225</sup>

171. The Route crosses a Central Region Regionally Significant Ecological Area with an Outstanding ranking where it crosses the Minnesota River along the existing 69 kV transmission line centerline.<sup>226</sup>

172. A review of the MnDNR's Natural Heritage Information System ("NHIS") indicated that there are a number of rare and unique animal species within a half mile of the Route including the Shovelnose Sturgeon, Rock Pocketbook, Yellow Sandshell, Mucket, Sessile-flowered Cress, Native Plant Communities, and Northern Poor Fern.<sup>227</sup>

173. In general, impacts to rare and unique resources would be avoided because the Project is a rebuild of an existing line along most of the route. The area of new transmission line construction would occur in an agricultural area where native species are not likely to occur.<sup>228</sup>

174. The construction process and the Project will be developed to avoid encroachment and effects on rare species and unique natural resources to the extent practicable.<sup>229</sup>

175. No significant impacts to rare and unique resources are anticipated to result from construction of the Project.

## 7. Application of Various Design Considerations

176. As part of its assessment of design alternatives, the Commission considers options that could maximize energy efficiency, mitigate adverse environmental effects and accommodate the expansion of transmission or generating capacity in the future.<sup>230</sup>

177. The Project and Route are designed with sufficient capacity to meet both existing and anticipated distribution load in and around the City of Chaska.<sup>231</sup>

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<sup>225</sup> Minn. Stat. § 216E.03, subd. 7(b)(1); Minn. R. 7850.4100(F).

<sup>226</sup> Ex. 2 at 87.

<sup>227</sup> Ex. 2 at 87-89.

<sup>228</sup> Ex. 23 at 68.

<sup>229</sup> Ex. 2 at 89.

<sup>230</sup> Minn. R. 7850.4100 (G) (2009).

<sup>231</sup> Ex. 2 at 13-14.

## 8. Use or Paralleling of Existing Right-of-Way, Survey Lines, Natural Division Lines, and Agricultural Field Boundaries

178. Minnesota's high voltage transmission line routing criteria require consideration of the Route's use or paralleling of existing rights-of-way, survey lines, natural division lines, and agricultural field boundaries.<sup>232</sup>

179. Using existing corridors reduces and minimizes impacts on planned future residential areas, commercial properties, and environmental and sensitive resources.<sup>233</sup>

180. The Route maximizes the use of existing road rights-of-way. Approximately 10 miles of the 11.4 miles of 115 kV transmission lines to be operational after completion of the Project are within or adjacent to existing road right-of-way.<sup>234</sup>

181. The Route runs parallel to Highway 212 along Segment 3.<sup>235</sup> The Route crosses Highway 212 and Highway 41 (Chestnut Street) along Segment 4.<sup>236</sup> MnDOT stated, in its comments, that the 115 kV transmission poles and conductors, "at rest, should be placed a safe and sufficient distance away from" the Highway 212 right-of-way where Segment 3 follows the trunk highway.<sup>237</sup>

182. In its comments, MnDOT stated that the crossings at Highway 212 and Highway 41 "appear to be relatively perpendicular to the trunk highway posing no foreseeable issues in issuing Utility Permits in those areas."<sup>238</sup> Construction along these segments would require that Applicants "remain a safe distance away from any bridges, sight corners, signals, drainage and lighting in these areas."<sup>239</sup>

183. MnDOT concluded that so long as the conditions regarding placement along Highway 212 and at the crossings of Highway 212 and Highway 41 are met, MnDOT foresees no issues in issuing Utility Permits for these segments of the Route.<sup>240</sup>

184. Along Segments 3 and 4, the City of Chaska requested certain modifications to the alignment proposed for the Project by Applicants.<sup>241</sup> These requests are in areas where the City of Chaska is actively pursuing expansion of its road right-of-way.<sup>242</sup>

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<sup>232</sup> Minn. Stat. § 216E.03, subd. 7(b)(9); Minn. R. 7850.4100(H).

<sup>233</sup> Ex. 2 at 34-35.

<sup>234</sup> Ex. 2 at 35.

<sup>235</sup> Ex. 21 at B.1 at General Vicinity Map 4 (Corrected Appendix B.1 and B.2).

<sup>236</sup> Ex. 21 at B.1 at General Vicinity Map 5-6 (Corrected Appendix B.1 and B.2).

<sup>237</sup> MnDOT Hearing Comments.

<sup>238</sup> *Id.*

<sup>239</sup> *Id.*

<sup>240</sup> *Id.*

<sup>241</sup> City Hearing Comments.

<sup>242</sup> *Id.*



185. The Route Permit Application and EA discussed construction of the Project approximately five feet from the existing road rights-of-way.<sup>243</sup> Given that the City of Chaska is actively acquiring additional land rights in Segments 3 and 4 for road rights-of-way, Applicants agree that it would be appropriate to not specify the alignment along Creek Road (Segment 3) and along County Road 140 (Segment 4), no “anticipated alignment” be identified on Route Permit maps.<sup>244</sup>

186. The Commission has previously issued Route Permits not identifying an “anticipated alignment” where Applicants have so requested and conditions warrant such approval.<sup>245</sup> The Route Permit should include a condition that Applicants will generally place the alignment of the 115 kV transmission facilities in Segment 3 and Segment 4 five feet from the edge of road rights-of-way unless engineering or soil condition considerations require different placement of structures.<sup>246</sup>

187. In its post-hearing comment letter, the City requested that the route width for the Project in the area of Highway 212 and County Road 140 (Segments 3 and 4) be revised from what was requested by Applicants in their Route Permit Application to accommodate a future interchange that the City plans to construct in the next six years.<sup>247</sup> The City of Chaska provided an exhibit detailing the proposed interchange.<sup>248</sup> Given the City’s plans to construct the interchange in the next six years, it would be prudent to design the 115 kV transmission facilities to accommodate this interchange. However, standard permit conditions will be adequate to minimize any potential conflicts with this future interchange.<sup>249</sup>

## 9. Electrical System Reliability

188. Minnesota’s high voltage transmission line routing criteria require consideration of the Project’s impact on electrical system reliability.<sup>250</sup>

189. The Project is designed to provide increased electrical system reliability by replacing aging lines and to meet the reliability requirements of the National Electric Safety Code (NESC) and the North American Electric Reliability Corporation (NERC).<sup>251</sup>

## 10. Costs of Constructing, Operating, and Maintaining the Facility

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<sup>243</sup> Ex. 21 at Appendix B.1; Ex. 23 at 13.

<sup>244</sup> Applicants’ Public Hearing Written Comments, May 24, 2013 (E-docket No. 20135-87419-01).

<sup>245</sup> *In the Matter of the Route Permit Application of Great River Energy for the Parkers Prairie 115 kV Transmission Line Project in Otter Tail County*, ORDER ISSUING ROUTE PERMIT at Order Points 4 and 5 and Route Permit Map 4 of 4, Docket No. ET2/TL-11-867 (Aug. 28, 2012).

<sup>246</sup> Applicants’ Public Hearing Written Comments, May 24, 2013 (E-docket No. 20135-87419-01).

<sup>247</sup> City of Chaska Public Hearing Comment Letter, May 28, 2013 (E-docket No. 20135-87533-01).

<sup>248</sup> *Id.*

<sup>249</sup> EFP Comments at 17 and 18, June 7, 2013 (E-docket No. 20136-87959-01 and 20136-87952-02).

<sup>250</sup> Minn. Stat. § 216E.03, subd. 7(b)(10); Minn. R. 7850.4100(K).

<sup>251</sup> Ex. 2 at 13 and 33.

190. Minnesota's high voltage transmission line routing criteria require consideration of the proposed route's cost of construction, operation, and maintenance.<sup>252</sup>

191. Construction cost estimates are subject to change as they can be affected considerably by several variables such as the timing of construction, availability of construction crews and components, and the final route selected by the Commission.

192. The estimated cost of the Project along the Route is anticipated to fall within a range of \$13 million and \$27 million.<sup>253</sup>

193. For all of the overhead designs, operating and maintenance costs for the transmission line will be nominal for several years since the line will be new, and minimal vegetation maintenance is required.<sup>254</sup> Annual operating and maintenance costs for the 115 kV transmission voltages across Applicants' Upper Midwest systems average approximately \$300 to \$500 per mile of transmission right-of-way.<sup>255</sup> The principal operating and maintenance cost will be inspections, which are usually done by fixed-wing aircraft and by helicopter on a regular basis.<sup>256</sup>

#### 10. Unavoidable Adverse Human and Natural Environmental Effects

194. Minnesota's high voltage transmission line routing criteria require consideration of the adverse human and natural environmental effects which cannot be avoided, for each proposed route.<sup>257</sup>

195. Unavoidable adverse impacts include the physical impacts to the land due to the construction of the Project.<sup>258</sup>

196. Applicants will implement measures as identified by regulatory agencies to minimize unavoidable impacts.<sup>259</sup>

#### 11. Irreversible and Irretrievable Commitments of Resources

197. Minnesota's high voltage transmission line routing criteria consideration of the irreversible and irretrievable commitments of resources that are necessary for each proposed route.<sup>260</sup>

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<sup>252</sup> Minn. R. 7850.4100(L).

<sup>253</sup> Ex. 2 at 14-15.

<sup>254</sup> Ex. 2 at 15.

<sup>255</sup> *Id.*

<sup>256</sup> *Id.*

<sup>257</sup> Minn. Stat. § 216E.03, subd. 7(b)(5) and (6); Minn. R. 7850.4100(M).

<sup>258</sup> See Ex. 2 at 72.

<sup>259</sup> See Ex. 2 at 81-82.

<sup>260</sup> Minn. Stat. § 216E.03, subd. 7(b)(11); Minn. R. 7850.4100(N).

198. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the use of those resources have on future generations.<sup>261</sup> Irreversible effects result primarily from the use or destruction of a specific resource that cannot be replaced within a reasonable time frame.<sup>262</sup> Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of action.<sup>263</sup>

199. There are few commitments of resources associated with this Project that are irreversible and irretrievable, but those few resources primarily relate to construction of the Project.<sup>264</sup>

200. Only construction resources, such as concrete, steel, and hydrocarbon fuels, will be irreversibly and irretrievably committed to this Project.<sup>265</sup>

## **S. Adequacy of EA**

201. The Commission is required to determine the adequacy of the EA.<sup>266</sup> An EA is adequate if it addresses the issues and alternatives raised in scoping and includes the items required by Minnesota Rule 7850.3700, subp. 4.<sup>267</sup>

202. The evidence on the record demonstrates that the EA is adequate because it addresses the issues and alternatives raised in the Scoping Decision and includes the items required by Minnesota Rule 7850.3700, subp. 4.<sup>268</sup>

## **T. Miscellaneous**

Citations to the transcripts or hearing record in these Findings of Fact are not inclusive of all applicable evidentiary support in the record.

Based on the foregoing Findings of Fact and the record in this proceeding, the ALJ makes the following:

## **CONCLUSIONS OF LAW**

### **Jurisdiction**

1. The Public Utilities Commission and Administrative Law Judge have jurisdiction to consider the Application for a Certificate of Need and the Application for a Route Permit.<sup>269</sup>

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<sup>261</sup> Ex. 23 at 76.

<sup>262</sup> *Id.*

<sup>263</sup> Ex. 23 at 76.

<sup>264</sup> *Id.*

<sup>265</sup> *Id.*

<sup>266</sup> Minn. R. 7850.3900, subp. 2.

<sup>267</sup> *Id.*

<sup>268</sup> EFP Public Hearing Written Comments, May 15, 2013; See Ex. 23.

## **Certificate of Need**

2. The Commission determined that the Certificate of Need Application was substantially complete and accepted the Application on August 21, 2012.<sup>270</sup>

3. Applicants gave notice as required by Minn. Stat. § 216E.03, subd. 3a; Minn. Stat. § 216E.03, subd. 4; Minn. R. 7850.2100, subp. 2, and Minn. R. 7850.2100, subp. 4.

4. EFP and the Commission gave notice as required in Minn. Stat. § 216E.03, subd. 6; Minn. R. 7850.2300, subp. 2; Minn. R. 7850.2500, subp. 2; Minn. R. 7850.2500, subp. 7; Minn. R. 7850.2500, subp. 8; and Minn. R. 7850.2500, subp. 9.

5. The public hearing was held on May 2, 2013, commencing at 7:00 p.m. at the Chaska City Hall - a time and place convenient to the public. Applicants and the Commission gave proper notice of the public hearing, and the public was given the opportunity to speak at the hearing and to submit written comments. A Commission staff member was present at the hearings to facilitate public participation.<sup>271</sup>

6. The criteria for evaluating the application for certificates of need are set forth in statute and rule.<sup>272</sup> Application of the criteria includes a determination of the need and, based on the evidence in the record, whether there is a more reasonable and prudent alternative to address that need.<sup>273</sup>

7. Applicants have demonstrated that there is a need for the Project to address the growing demand for electric power in the southwest Twin Cities area, due in part to the addition of a large load in the near future from at least one new data center.

8. No more reasonable and prudent alternative has been demonstrated to address the need identified by the Applicants.

9. The evidence on the record demonstrates that the Certificate of Need should be granted for the Project.

## **Route Permit**

10. The Commission determined that the Route Permit Application was substantially complete and accepted the Application on September 11, 2012.<sup>274</sup>

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<sup>269</sup> See, Minn. Stat. §§ 14.57 - 14.62 and 216E.02, subd. 2.

<sup>270</sup> CN Ex. 21 at 3-4.

<sup>271</sup> Minn. Stat. § 216B.243, subd. 4.

<sup>272</sup> Minn. Stat. § 216B.243, subd. 3; Minn. R. 7849.0120.

<sup>273</sup> See, e.g., Minn. R. 7849.0120 B.

<sup>274</sup> Ex. 8 at 5.

11. EFP has conducted an appropriate environmental analysis (EA) of the Project for purposes of this route permit proceeding. The EA satisfies Minn. R. 7850.3700. Specifically, the EA addresses the issues and alternatives raised in scoping to a reasonable extent considering the availability of information and includes the items required by Minn. R. 7850.3700, subp. 4, and was prepared in compliance with the procedures in Minn. R. 7850.3700.

12. Applicants gave notice as required by Minn. Stat. § 216E.03, subd. 3a; Minn. Stat. § 216E.03, subd. 4; Minn. R. 7850.2100, subp. 2; Minn. R. 7850.2100, subp. 4.

13. EFP gave notice as required by Minn. Stat. § 216E.03, subd. 6; Minn. R. 7850.2300, subp. 2; Minn. R. 7850.2500, subp. 2; Minn. R. 7850.2500, subp. 7; Minn. R. 7850.2500, subp. 8; and Minn. R. 7850.2500, subp. 9.

14. The public hearing was held on May 2, 2013, commencing at 7:00 p.m. at the Chaska City Hall - a community located along the proposed high voltage transmission line route. Applicants and the Commission gave proper notice of the public hearing, and the public was given the opportunity to speak at the hearing and to submit written comments. A Commission staff member was present at the hearing to facilitate public participation.<sup>275</sup>

15. All procedural requirements for the Route Permit have been satisfied.

16. The evidence on the record demonstrates that the Applicants' Route for the Project and Associated Facilities satisfies the route permit criteria set forth in Minn. Stat. § 216E.03, subd. 7, and Minn. R. 7850.4100.

17. The evidence in the record demonstrates that the Route satisfies the route permit criteria set forth in Minn. Stat. § 216E.03, subd. 7 and Minn. R. 7850.4100.

18. The Route does not present a potential for significant adverse environmental effects pursuant to the Minnesota Environmental Rights Act (MERA) or the Minnesota Environmental Policy Act (MEPA).

19. The evidence in the record demonstrates that the Route (Segment 1, Segment 2, Segment 3 with "no anticipated alignment along Creek road," Segment 4 with "no anticipated alignment along County road 140," and minor realignment near the residence at 404 Creek Lane, Segment 5 with "no anticipated alignment," and Segment 6) is the best alternative on the record for the 115 kV transmission project between Aue Lake, the Victoria Substation, and the Scott County Substation.

20. The evidence in the record demonstrates that the Commission should grant a route permit for the 115 kV transmission line and associated facilities, including substation modifications, along the Route.

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<sup>275</sup> Minn. Stat. § 216B.243, subd. 4.

21. The Commission's final Route permit decision should include, at a minimum the following special conditions:

- a. Applicants must articulate a compelling public purpose for abandoning in place the existing 69 kV transmission facilities of Segment 3a. Otherwise, the Commission should consider the City of Chaska's request that the 69 kV transmission lines and facilities of Segment 3a be removed under the same terms and conditions as the removal of Segment 5a;
- b. Require Applicants to release of the transmission easements along Segment 5a;
- c. Require installation of two additional bird flight diverters near Structure 142 and the midpoint of Segment 3;
- d. Require placement of the transmission lines in Segment 6 in such a way that will accommodate the extension of Bonnevista Drive in Jackson Township;
- e. Require Applicants to allow the Metropolitan Council to review final design plans before construction of the Project is initiated;
- f. Require placement of the 115 kV transmission facilities in Segment 3 and Segment 4 five feet from the edge of road rights-of-way unless engineering or soil condition considerations necessitate different placement of structures; and
- g. Require Applicants to replace the existing wooden pole in front of the Ernst property with a cantilever structure, placing all of the conductors and davit arms on one side of the transmission line poles (e.g. the road side), and located a reasonable distance west of the existing pole.

22. The Route Permit should require Applicants to obtain all required local, state, and federal permits and licenses, to comply with the terms of those permits or licenses, and to comply with all applicable rules and regulations.

23. The Commission's final permit decision should include provisions to ensure that the Applicants employ such construction and management practices so as to avoid the displacement of homes and mitigate impacts to the natural environment.

Dated: July 22, 2013

s/M. Kevin Snell  
M. KEVIN SNELL  
Administrative Law Judge

Reported: Shaddix & Associated, transcribed (One volume)

### **NOTICE**

Under the PUC's Rules of Practice and Procedure, Minn. R. 7829.0100 to 7829.3200, exceptions to this Report, if any, by any party adversely affected must be filed within 15 days of the mailing date hereof with the Executive Secretary of the PUC, 350 Metro Square Building, 121 Seventh Place East, St. Paul, Minnesota 55101-2147. Exceptions must be specific, relevant to the matters at issue in this proceeding, and stated and numbered separately. Proposed Findings of Fact, Conclusions, and Order should be included, and copies thereof served upon all parties.

The PUC shall make its determination on the applications for the Certificate of Need and Route Permits after expiration of the period to file Exceptions as set forth above, or after oral argument, if such is requested and had in this matter. In accordance with Minn. R. 7850.2700, the PUC shall make a final decision on the Route Permits within 60 days after receipt of this Report.

Notice is hereby given that the PUC may accept, modify, condition, or reject this Report of the Administrative Law Judges and that this Report has no legal effect unless expressly adopted by the PUC.

## **SCHEDULE**

to

To Findings of Fact, Conclusions of Law, and Recommendation

OAH 61-2500-30573

MPUC E002/TL 12-401

MPUC E002/CN 11-826

This Schedule consists of 17 pages of Proposed Route maps that comprise the recommended route, route widths, and alignments (if any) for the proposed new transmission lines.